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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/591,245	06/09/2000	Jung-Gi Kim	P2008	3212

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EXAMINER
WINTERS, MAREISHA N

ART UNIT	PAPER NUMBER
2153	

DATE MAILED: 08/22/2003   3

Please find below and/or attached an Office communication concerning this application or proceeding.

●	Application No 09/591,245	●	Applicant(s) KIM, JUNG-GI
Office Action Summary	**Examiner** Mareisha N. Winters		**Art Unit** 2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 June 2000</u> .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-24</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-24</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>09 June 2000</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)	4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) ☐ Other: .

DETAILED ACTION

1.   This Office Action is in response to the communication filed on June 09, 2000.

2.   Claims 1-24 are pending in the application.

Priority

3.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers

have been placed of record in the file.

Specification

4.   Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a
separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed
150 words in length since the space provided for the abstract on the computer tape used by the
printer is limited. The form and legal phraseology often used in patent claims, such as "means"
and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist
readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the
title. *It should avoid using phrases which can be implied, such as, "The disclosure concerns,"
"The disclosure defined by this invention," "The disclosure describes," etc.*

Claim Objections

5.   Claim 8 is objected to because of the following informalities: in line 12, the phrase

"wherein said personal computer further operable" should read --wherein said personal computer

is further operable--. Appropriate correction is required.

6.   Claim 13 is objected to because of the following informalities: in line 1, the phrase

"wherein said host computer further operable for attaching" should read --wherein said host

computer *is* further operable for attaching--. Appropriate correction is required.

7.   Claim 17 is objected to because of the following informalities: in line 1, the phrase

"wherein the method further comprising the step" should read --wherein the method further

comprises the step--. Appropriate correction is required.

8.   Claim 19 is objected to because of the following informalities: in line 10 the semicolon

after the word "memory" should be replaced by a period. Appropriate correction is required.

Claim Rejections - 35 USC § 112

9.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

10.   Claims 5, 6, 7, 10, 17 and 22 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claims 5 (line 2), 6 (line 2), 7 (line 1) and 17 (line 2) recite the limitation "the

production-process program". This limitation is ambiguous. In order to clarify the claim

language should "the production-process program" be --the production-process*ing* program--?

Claim 10 recites the limitation "said second means" in line 2. In order to clarify the claim

language should "said second means" be --said second *memory* means--?

Claim 22 recites the limitation "The apparatus as claimed in Claim 21" in line 1. There is

insufficient antecedent basis for this limitation in the claim. In order to clarify the claim

language should "The apparatus as claimed in Claim 21" read "The *method* as claimed in Claim

21"?

Claim Rejections - 35 USC § 102

11.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12.   Claims 1-5, 8-10, 12-16, 19-22, and 24 are rejected under 35 U.S.C. 102(e) as being

anticipated by U.S. Patent No. 6,526,092 to Nelson et al. (hereinafter "Nelson").

In considering claim 1, Nelson discloses an apparatus for upgrading the program stored in

a firmware board (column 1, lines 16-18) comprising:

a host computer for converting an execution file prepared by an operator into a file for

production (column 15, lines 24-31);

a flash memory disposed in the firmware board for storing a production-processing

program (Fig. 2, "217"); and

a personal computer (PC) for receiving the production file downloaded from the host

computer and for storing the downloaded file in a corresponding region of the flash memory

(column 3, lines 43-51).

In considering claim 2, Nelson discloses comprising an RS232C line for connecting the

PC to the firmware board (Fig. 2, "215").

In considering claim 3, Nelson discloses wherein the host computer, prior to creation of

the file for production, attaches information relating to a storage address of the flash memory, a

compression state, and a booting state for the production file (column 8, lines 23-31).

In considering claim 4, Nelson discloses wherein the PC transmits the production file to the flash memory when a transmission command is inputted thereto (column 10, lines 2-3).

In considering claim 5, Nelson discloses wherein the PC stores the production file in the flash memory using the production-processing program in the flash memory (column 3, lines 56-57).

In considering claim 8, Nelson discloses apparatus for upgrading the operation system firmware of a personal computer system by downloading an updated firmware to acquire new capabilities (column 2, lines 1-6), comprising:

a host computer for converting an execution file prepared by an operator into said updated firmware (column 15, lines 24-31);

at least one personal computer coupled to said host computer for receiving said new firmware downloaded from said host computer (column 3, lines 43-51);

a firmware board having:

a communication interface means connected for communicating with said personal computer and for transferring data between said personal computer and said firmware board (Fig. 2, "215");

a first memory means coupled to said communication means for storing a boot program, operating codes, and said operating system firmware (Fig. 2, "217" and column 8, lines 16-21); and

wherein said personal computer is further operable for storing said updated firmware downloaded from said host computer in a corresponding region of said first memory means (column 3, lines 43-51).

In considering claim 9, Nelson further comprising a second memory means (Fig. 2, "216") coupled to said first memory means (Fig. 2, "217") for storing a copy of information stored in said first memory means to be replaced with said updated firmware (column 3, lines 47-51).

In considering claim 10, Nelson discloses wherein said replaced updated firmware in said second memory means is transferred back to the corresponding region of said first memory means (column 3, lines 47-51).

In considering claim 12, Nelson discloses wherein said first memory means comprises a flash memory (Fig. 2, "217"), and wherein said communication means comprises a RS232C line (Fig. 2, "215").

In considering claim 13, Nelson discloses wherein said host computer is further operable for attaching a storage address information of said first memory means to said updated firmware (column 8, lines 26-27).

In considering claim 14, Nelson discloses method for upgrading the program of a firmware board (column 1, lines 16-18) comprising the steps of:

providing a flash memory in the firmware board for storing a production-processing program (Fig. 2, "217");

creating, by a host computer, a file for a production by converting an execution file prepared in advance into the file for production (column 15, lines 24-31);

receiving the production file, by a personal computer (PC) downloaded from the host computer (column 3, lines 43-47); and

storing the production file in the corresponding region of the flash memory (column 3, lines 43-51).

In considering claim 15, Nelson discloses wherein the production file includes a header portion containing information relating to a storage address of the flash memory, a compression state, and a booting state for the production file (column 8, lines 23-31).

In considering claim 16, Nelson discloses wherein the PC transmits the file for production to the flash memory when a transmission command is inputted thereto (column 10, lines 2-3).

In considering claim 19, Nelson discloses a method for upgrading operation system firmware of a personal computer system (column 1, lines 16-18), comprising the steps of:

providing an updated firmware in a host computer to provide new capabilities (column 15, lines 24-31);

downloading said updated firmware from said host computer to at least one personal computer system (column 3, lines 43-47);

establishing a communication connection between said personal computer system and a first memory of said personal computer system (Fig. 2, "215");

transferring said updated firmware to said first memory of said personal computer system by way of said communication connection (column 3, lines 56-57); and

storing said updated firmware in said first memory (column 3, lines 43-51).

In considering claim 20, Nelson discloses wherein said host computer further performs the step of attaching a storage address information of said first memory to said updated firmware (column 8, lines 26-27).

In considering claim 21, Nelson discloses including the step of duplicating the

information stored in said first memory in a second memory, coupled to said first memory, so

that the duplicated information can be replaced with said updated firmware in said second

memory (column 3, lines 47-51).

In considering claim 22, Nelson discloses wherein said updated firmware in said second

memory is transferred back to the corresponding region of said first memory (column 3, lines 47-

51).

In considering claim 24, Nelson discloses wherein said first memory comprises a flash

memory (Fig. 2, "217"), and wherein said communication connection comprises an RS232C line

(Fig. 2, "215").

Claim Rejections - 35 USC § 103

13.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

14.   Claims 6, 7, 11, 17, 18 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Nelson.

In considering claims 6, 7, 11, 17, 18 and 23, although Nelson does not explicitly state

the use of Dynamic or Static RAM, it does disclose the use of a second memory that is RAM for

storing a copy of the production-processing program from the flash memory (column 3, lines 47-

51) and transferring the production-processing program to flash memory when the program is

upgraded (column 2, lines 56-57). A person having ordinary skill in the art would have readily

recognized the advantages and desirability of modifying Nelson by including the limitation of (1)

Dynamic RAM and (2) Static RAM in order to:

(1) allow for the system to hold more data than when using RAM and to reduce system

cost; and

(2) improve the systems efficiency by increasing speed and reducing power consumption.

Conclusion

15.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

U.S. Patent No. 6,009,497 to Wells et al.

U.S. Patent No. 6,055,632 to Deegan et al.

U.S. Patent No. 6,253,281 to Hall

U.S. Patent No. 6,601,212 to Guha et al.

International Publication WO 96/02034 to Andreano et al.

16.   A shortened statutory period for response to this action is set to expire **3 (three) months**

and 0 (zero) days from the mail date of this letter. Failure to respond within the period for

response will result in **ABANDONMENT** of the application (see 35 U.S.C 133, M.P.E.P

710.02, 710.02(b)).

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Mareisha N. Winters whose telephone number is (703) 305-7838.

The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Glenton B. Burgess can be reached on (703) 305-4792. The fax phone numbers for

the organization where this application or proceeding is assigned are (703) 746-7239 for official

communications, (703) 746-7240 for non-official communications and (703) 746-7238 for After

Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-3900.

Mareisha N. Winters
Patent Examiner
Art Unit 2153
August 19, 2003

KRISNA LIM
PRIMARY EXAMINER